

Responses to November 4, 2014  
US EPA FINAL COMMENTS ON THE AREA 1 FEASIBILITY  
STUDY REPORT

GENERAL COMMENTS

**Commenting Organization: USEPA**  
**General Comment #: 1**

**Commenter: Saric**

The discussion of background concentrations for both fish and sediment must be further highlighted in the FS. This is important as these background concentrations could be realistic endpoints. Only through long-term monitoring will it be determined if Morrow Lake, Ceresco Reservoir, or another location represents the best background location.

***Response:** Discussion of how background concentrations may limit the decline in PCB concentrations in fish has been incorporated throughout the document. Previously this information was only included in the discussion of RAOs in Section 2. Both Morrow Lake and Ceresco Reservoir data were used to provide background information. Text has been added regarding long-term monitoring and future evaluation of background and appropriate reference areas.*

**Commenting Organization: USEPA**  
**General Comment #: 2**

**Commenter: Saric**

When discussing the time period for each sediment remedy to meet remedial action objectives, make sure the time period covers all of Area 1, and is not only specific to the remedial reach portion of Area 1.

***Response:** The predicted time to reach fish issue concentration goals in the FS is representative for all of Area 1. Clarifications have been made to the text where appropriate to emphasize that the alternatives are Area 1-wide.*

**Commenting Organization: USEPA**  
**General Comment #: 3**

**Commenter: Saric**

It appears the sediment replacement value used in sediment remedy S-5 may be too high and/or there is no credit for recovery during the 10 year construction period. This would result in the time for sediment remedy S-5 to meet remedial action objectives to be reduced. This time period may need to be adjusted.

***Response:** The replacement value of 1 mg/kg was previously agreed to by the Work Group because it represents realistic conditions where access may prohibit 100% removal of targeted sediment and takes into account flow conditions in the river that would erode temporary thin-layer caps or allow redeposition of upstream sediment (the post-remedial SWAC in Portage Creek is 1.8 mg/kg, for example). The post remedial SWACs for S-5 are currently estimated as 0.23, 0.17, and 0.15 mg/kg for intervals 1, 2, and 3; and 0.22 mg/kg for all three intervals, combined. Reducing the replacement value is not expected to substantially reduce these post-*

*SWAC estimates. Text regarding the impact and uncertainty of the replacement value selected has been added to the FS.*

*The timeframe for S-5 has been reduced by using a log-linear regression equation for the step down as explained in emails from Cynthia Draper to Paul Bucholtz on and the Work Group on October 30, 2014. This adjustment has reduced the predicted time to be closer to those of S-3 and S-4. The S-5 time estimate is now 47 years for smallmouth bass fillet, as compared to 32 and 25 years in S-3 and S-4, respectively.*

**Commenting Organization: USEPA**  
**General Comment #: 4**

**Commenter: Saric**

Given the differences in SWAC reduction between sediment remedies S-3 and S-4, the FS needs to clarify why the difference between meeting remedial action objectives is only two years.

**Response:** *The revised fish projections now present an estimated seven-year difference between alternatives S-3 and S-4 (i.e., 32 and 25 years for smallmouth bass fillet, respectively). The projection for S-4 includes additional construction time where MNR will not occur and the step down is limited by the change in the SWAC. A difference of only seven years in time predicted to reach the fish tissue goals is reasonable given: 1) the additional mass of PCB removed in S-4 is only approximately 14% more than that removed in S-3 and 2) the geomorphic evaluation indicated that few high concentration areas are located in the added edge removal included in S-4.*

**Commenting Organization: USEPA**  
**General Comment #: 5**

**Commenter: Saric**

It appears that the cost estimates presented in Table 4-9 (S-3), as compared to Tables 4-5 through 4-8 (S-3 and S-4), use higher estimates of contingency on capital costs (45% vs. 35%), project and construction management (10% vs. 5%), and pre-remedial design/sampling/planning (\$2.4 million vs. \$0.33 million). For the purposes of this FS, the contingency, project management and construction percentages should be the same across all alternatives.

**Response:** *The increased contingency percentages and higher sampling costs for S-5 reflect the higher uncertainty, larger scope, and the much larger area to be addressed/sampled. S-5 addresses 22 miles of river that must be sampled/remediated versus 3 miles for S-3 and S-4; plus the 44 miles of access agreements/access roads/staging areas/construction zone counting both banks. As a result, the cost estimates and applied percentages have not been modified.*

## SPECIFIC COMMENTS

**Commenting Organization: USEPA**

**Commenter: Dillon**

**Section: Table 1-23**

**Specific Comment # 1**

The table currently lists the shrew RBCs and percent home ranges under the high sensitivity columns only. This is misleading and suggests that the shrew RBCs are somewhat analogous to the sensitivity range for the avian RBCs. The table does footnote that there is no distinction between high and low sensitivity for the shrew RBCs. Please add the RBCs and per cent home ranges to the mid-sensitivity columns. The footnote should remain as is.

**Response:** *This table was revised and re-submitted with the June 16, 2014 FS. See current FS Table 1-11.*

**Commenting Organization: USEPA**

**Commenter: Saric**

**Section: 2.3**

**Page #: 2-5 and 2-7**

**Specific Comment # 2**

Please make the following text changes in bold. On page 2-5 change the text to read as follows:

*"The following State requirement was reviewed, but was concluded to not be an ARAR **for runoff from floodplain soils** because although there will be discharges to surface water from each of the remedies described herein, the floodplains are nonpoint source and none of the remedies included herein anticipate discharges into the river from point sources:*

*Part 8 of NREPA as it relates to water quality based effluent limits (WQBELs) for point sources."*

On page 2-7 change the text to read as follows:

*At the state level, chemical-specific ARARs applicable to water may include the provisions of Part 31 (Water Resources Protection) of the NREPA, MCL324.3101 et seq, and the rules promulgated under Part 31 at Mich. Admin. Code R., 323.1041-1097 and R. 323.1100-1117 (Part 4 Rules), R. 323.1201-1221 (Part 8 Rules), and R. 323.1211-1329 (Part 13 Rules). These provisions provide the water quality standards for surface waters in Michigan and establish permit requirements for alterations of floodplains and discharges to surface waters, Criteria are applicable to venting groundwater, storm water, and discharges associated with remedial action **work**.*

*The provisions of the Part 8 Rules (also promulgated under Part 31) and found at Mich. Admin, R. 323.1201-1221 are relevant and appropriate. The Part 8 Rules establish toxic substance WQBELs for point source discharges,*

**Response:** *The text has been revised as requested.*

**Commenting Organization: USEPA**  
**Section: Table 2-10**  
**Specific Comment # 3**

**Commenter: Dillon**

As with Table 2-13, please add the RBCs for the fox and shrew to the mid-sensitivity columns. In addition add a footnote stating that they are the same for these species.

***Response:** This table was already revised and re-submitted with the June 16, 2014 FS. See current FS Table 2-10.*

**Commenting Organization: USEPA**  
**Section: 4**  
**Specific Comment # 4**

**Page #: 4-16, 1st Para**

**Commenter: Keiser**

*"It is important to note that PCB mass is not a predictor of ecological or human health risks. Rather, it is the exposure concentration that is used to determine whether risk to human health and the environment are within an acceptable range."*

The text should be revised to include that for Alternatives 4-A (4-B) less mass would be remain for downstream transport, this addresses RAO 4 to a greater degree than SA-3A (3B).

Note "important" is misspelled in the text.

***Response:** The text has been revised as requested, also noting that the difference in mass removed between alternatives S-3 and S-4 is approximately 14%.*